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PTO/SB/01 (12-97)  
Approved for use through 9/30/00. OMB 0651-0032  
Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

<b>DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)</b>  <input checked="" type="checkbox"/> Declaration Submitted with Initial Filing      OR <input type="checkbox"/> Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)	<b>Attorney Docket Number</b>	THIN-03800
	<b>First Named Inventor</b>	S. Ward Casscells
	<b>COMPLETE IF KNOWN</b>	
	<b>Application Number</b>	Not Assigned
	<b>Filing Date</b>	December 17, 2000
	<b>Group Art Unit</b>	Not Assigned
	<b>Examiner Name</b>	Not Assigned

As a below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**ABLATION OF ATRIAL FIBRILLATION BY THERMAL APOPTOSIS**

the specification of which (Title of the Invention)

☒ is attached hereto  
OR  
☐ was filed on (MM/DD/YYYY) [ ] as United States Application Number or PCT International Application Number [ ] and was amended on (MM/DD/YYYY) [ ] (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				YES	NO
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date (MM/DD/YYYY)	<input type="checkbox"/> Additional provisional application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.
60/172,181	December 17, 1999	

[Page 1 of 2]

Burden Hour Statement: This form is estimated to take 0.4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

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## DECLARATION — Utility or Design Patent Application

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

U. S. Parent Application or PCT Parent Number	Parent Filing Date (MM/DD/YYYY)	Parent Patent Number (if applicable)

☐ Additional U.S. or PCT international application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

As a named inventor, I hereby appoint the following registered practitioner(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

☐ Customer Number

OR

☒ Registered practitioner(s) name/registration number listed below

Place Customer Number Bar Code Label here

Name	Registration Number	Name	Registration Number
C. Steven McDaniel	33,962	Elizabeth R. Hall	37,344

☐ Additional registered practitioner(s) named on supplemental Registered Practitioner Information sheet PTO/SB/02C attached hereto.

Direct all correspondence to:

☐ Customer Number or Bar Code Label

OR ☒ Correspondence address below

Name	C. Steven McDaniel				
Address	P.O. Box 2244				
Address					
City	Austin	State	TX	ZIP	78768-2244
Country	USA	Telephone	512.472.8282	Fax	512.472.8181

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name of Sole or First Inventor:	<input type="checkbox"/> A petition has been filed for this unsigned inventor						
Given Name (first and middle (if any))			Family Name or Surname				
S. Ward			Casscells				
Inventor's Signature					Date		
Residence: City	Houston	State	TX	Country	USA	Citizenship	USA
Post Office Address	1101 Bates Street						
Post Office Address							
City	Houston	State	TX	ZIP	77030	Country	USA

☐ Additional inventors are being named on the supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY  
STATUS (37 CFR 1.9(f) AND 1.27 (d)) - NONPROFIT ORGANIZATION**

Docket No.  
THIN-03800

Serial No.  
Not Assigned

Filing Date  
Concurrently Herewith

Patent No.  
Not Assigned

Issue Date  
Not Applicable

Applicant/ S. Ward Casscells, III  
Patentee:

Invention: Ablation of Atrial Fibrillation by Thermal Apoptosis

I hereby declare that I am an official empowered to act on behalf of the nonprofit organization identified below:

NAME OF ORGANIZATION: Texas Heart Institute  
ADDRESS OF ORGANIZATION: 1101 Bates Street, Houston, Texas 77030
**TYPE OF NONPROFIT ORGANIZATION:**

- ☐ University or other Institute of Higher Education
- ☐ Tax Exempt under Internal Revenue Service Code (26 U.S.C. 501(a) and 501(c)(3))
- ☐ Nonprofit Scientific or Educational under Statute of State of The United States of America  
Name of State: \_\_\_\_\_ Citation of Statute: \_\_\_\_\_
- ☒ Would Qualify as Tax Exempt under Internal Revenue Service Code (26 U.S.C. 501(a) and 501(c)(3)) if Located in The United States of America
- ☐ Would Qualify as Nonprofit Scientific or Educational under Statute of State of The United States of America if Located in The United States of America  
Name of State: \_\_\_\_\_ Citation of Statute: \_\_\_\_\_

I hereby declare that the above-identified nonprofit organization qualifies as a nonprofit organization as defined in 37 C.F.R. 1.9(e) for purposes of paying reduced fees to the United States Patent and Trademark Office regarding the invention described in:

- ☐ the specification to be filed herewith.
- ☒ the application identified above.
- ☐ the patent identified above.

I hereby declare that rights under contract or law have been conveyed to and remain with the nonprofit organization with regard to the above identified invention.

If the rights held by the above-identified nonprofit organization are not exclusive, each individual, concern or organization having rights to the invention is listed on the next page and no rights to the invention are held by any person, other than the inventor, who could not qualify as an independent inventor under 37 CFR 1.9(c) or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:

- ☐ no such person, concern or organization exists.  
☒ each such person, concern or organization is listed below.

FULL NAME Texas Heart Institute

ADDRESS 1101 Bates Street, Houston, Texas 77030

☐ Individual ☐ Small Business Concern ☒ Nonprofit Organization

FULL NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

☐ Individual ☐ Small Business Concern ☐ Nonprofit Organization

FULL NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

☐ Individual ☐ Small Business Concern ☐ Nonprofit Organization

FULL NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

☐ Individual ☐ Small Business Concern ☐ Nonprofit Organization

Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING: Michael G. McGee

TITLE IN ORGANIZATION: Vice President for Research Administration

ADDRESS OF PERSON SIGNING: Texas Heart Institute, P.O. Box 20345, Houston, Texas 77225

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors: S. Ward Casscells, III

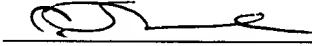
Serial No.: Not Yet Assigned

Filing Date: December 17, 2000

Examiner: Not Yet Assigned

I hereby certify that this correspondence is being deposited with the U.S. Postal Service via Express Mail No. EE308304805US with sufficient postage in an envelope addressed to: Assistant Commissioner for Patents, Washington, DC 20231, on the date indicated below:

12.17.00  
Date

  
C. Steven McDaniel

Title: Ablation of Atrial Fibrillation by Thermal Apoptosis

POWER OF ATTORNEY BY ASSIGNEE

Under the provisions of 37 C.F.R. §§ 3.71 and 3.73(b), the undersigned assignee of record of the entire interest in the above-identified patent/patent application by virtue of an assignment recorded (check as applicable):

- ☒ Concurrently herewith
- ☐ Date Recorded \_\_\_\_\_
- ☐ Reel \_\_\_\_\_ Frame \_\_\_\_\_

and/or

- ☐ By virtue of the documents attached hereto showing chain of title into Assignee,

elects to conduct the prosecution of the application/maintenance of the patent to the exclusion of the inventor(s). The undersigned hereby declares that he has reviewed the above-referenced evidentiary document(s) and certifies that, to the best of his knowledge and belief, title is in the Assignee, and further declares that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true. The assignee hereby revokes any previous powers of attorney and appoints the following to prosecute this application/maintain this patent and transact all business in the patent and Trademark Office connected therewith:

<u>Name</u>	<u>Reg. No.</u>
C. Steven McDaniel	33,962
Elizabeth R. Hall	37,344

[illegible]

**TEXAS HEART INSTITUTE**

**By:** \_\_\_\_\_

**Title:** Vice President for Research Administration